

### REMARKS

Applicants respectfully acknowledge receipt of the Office Action mailed May 19, 2002. In that Office Action, the Examiner objected to claims 74-78 as being in improper dependent form; rejected claims 39-45, 73, 74 under 35 U.S.C. § 102(b) as anticipated by *Landry*; rejected claims 34-45, 53-59, 61, 73, 74 under 35 U.S.C. § 102(b) as anticipated by *Callender et al.*; and rejected claims 34-45, 52-59, 61, 73, 79-81 under 35 U.S.C. § 103(a) as obvious in view of *Callender et al.*. In response, Applicants have amended the claims and respectfully traverse the rejections for the reasons set out below.

#### Rejections under 37 CFR 1.75(c)

The Examiner rejected claims 74-78 under 37 CFR 1.75(c), on the grounds that they recite a temperature range that is outside the range recited in their base claim. Applicants have amended claim 74 by placing it independent form, including the limitation added to claim 39 and discussed below, and correcting the inconsistency in the recitation of temperature. Because this cures the grounds for objection, and for the reasons set out below, applicants submit that claim 74 and the claims that depend from it are allowable.

Applicants submit that claim 78, which depends from claim 39, is not inconsistent with claim 39. Applicants therefore request that the objection to claim 78 be withdrawn.

#### § 102(b) Rejection of claims 39-45, 73, 74 over *Landry*

In rejecting claims 39-45, 73, 74 as anticipated by *Landry*, the Examiner takes the position that each limitation of the claims is disclosed in that reference. Applicant respectfully disagrees. Nothing in *Landry* even mentions porosity or pore size distribution and *Landry* neither teaches nor suggests that porosity and pore size distribution of ceramic bodies can be controlled as recited in the preamble of claim 39. Therefore, *Landry* cannot be used as the basis for a rejection of the claims under § 102.

Nonetheless, applicants have amended the claims to further highlight the deficiency of *Landry*, namely that he does not teach control of the pore size and pore size distribution through the selection of a desired carboxylic acid composition. Claim 39 has been amended to include the step of "selecting a carboxylic acid composition that will result in a desired porosity and pore size distribution." This reflects the discoveries made by the present inventors and claimed herein,

namely that pore size and pore size distribution change, that the change is dependent at least in part on the carboxylic acid composition that is used, and that pore size and pore size distribution can be controlled by selecting the carboxylic acid composition.

The limitation in question is supported in the application at page 7, lines 13-17, and at page 12, lines 4-8. The former passage reads:

“In accordance with the present invention, the size and distribution of pores within the alumina-oxide ceramic is dependent on the identity of the carboxylate substituents. In particular, the formation of intra- versus inter-granular porosity is dependent on the identity of the carboxylate substituents. Similarly, size and distribution of the pores is controlled by the choice of the organic substituents.”

It should be noted that the limitation added to claim 39 does *not* require that two or more carboxylic acids be used or mixed. Instead, the limitation restates the concept expressed in the preamble, namely that the properties of the ceramic bodies made by the present method can be controlled (selected). The *Landry* reference wholly fails to contemplate porosity, let alone enable control of porosity and pore size distribution.

Hence, claim 39 and all of the claims that depend from it are allowable.

§ 102(b) Rejection of claims 34-45, 53-59, 61, 73, 74 over *Callender et al.*<sup>1</sup>

In rejecting claims 34-45, 53-59, 61, 73, 74 as anticipated by *Callender et al.*, the Examiner takes the position that each limitation of the claims is disclosed in that reference. First, Applicants would respectfully point out that the *Callender et al.* reference is not a proper 102(b) reference as it was not published more than one year before the priority date of the present case. Specifically, the present application is entitled to the priority date of provisional application Serial No. 60/079/926, filed on March 30, 1998.<sup>2</sup> The *Callender et al.* reference was received for publication in May 1997 and its second footnote indicates that an Abstract of it was published in October 1997. Thus, the *Callender et al.* reference is not a § 102(b) reference against the present application.

Furthermore, Applicants respectfully submit that the reference does not in fact support the rejection. *Callender et al.* do not mention porosity or pore size distribution. Likewise, *Callender et al.* neither teach nor suggest that porosity and pore size distribution of ceramic bodies can be

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<sup>1</sup> Applicants note that the Examiner refers to the *Callender et al.* reference as “Reference AE on PTO-1449 filed 3/11/03,” when in fact that reference is Reference **BF** on that 1449. For purposes of the arguments above, Applicants have assumed that the Examiner intended to refer to reference BF. If that is not the case, the Examiner is encouraged to telephone the undersigne.

<sup>2</sup> Notably, the passage cited above in support of the amendment to claim 39 was present in the provisional application.

controlled as recited in the preamble of claim 39 and now in the first claimed element of amended claim 39. Therefore, *Callender et al.* cannot be used as the basis for a rejection of the claims under § 102.

§ 103(a) Rejection of claims 34-45, 52-59, 61, 73, 79-81 in view of *Callender et al.*

The Examiner also rejects claims 34-45, 52-59, 61, 73, 79-81 as obvious in view of *Callender et al.* The undersigned respectfully submits that she is unable to locate certain passages referred to by the Examiner, namely the teaching of the dependency of firing temperature on the type of carboxylic acid, asserted to be on page 2428, and the teaching of the selection of firing temperature on the bases of desired density, asserted to be on page 2431. If the Examiner continues the present rejection, he is respectfully requested to identify the subject passages more explicitly, or to quote them.

Regardless, Applicants further submit that the *Callender et al.* reference is not available as prior art and that the claims as amended are not obvious in view of the teachings of *Callender et al.*

Allowable Claims

Claim 46 has been placed in independent form so that it is in condition for allowance, along with claims 47-51, which depend from it.

New claim 82 combines the limitations of unamended claim 39 with the limitation of original claim 46, but omits the limitations of intervening claims 41 and 43. Applicants submit that it is allowable for the reasons set forth previously with respect to claim 46.

Conclusion

Applicants believe that they have fully responded to the Office Action. If the Examiner has any questions or comments, or otherwise feels it would be advantageous, he is encouraged to telephone the undersigned at (713) 238-8043.

Respectfully submitted,

  
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